



Washington State Department of Agriculture  
Pesticide Management Division  
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## REGISTRATION OF SPRAY ADJUVANTS

WSDA has developed this guidance for registrants of spray adjuvant products in order to clarify Washington registration and labeling requirements. By following this guidance, registrants can help to minimize the chance for delays during the registration process. Here are some of the most common problems noted during review of adjuvant registrations, and suggestions to avoid them.

1. **Incomplete registration package.** WSDA requires submission of an application for registration of pesticides (AGR 630-4216), a supplemental information form (AGR 630-4119), 2 copies of the product label, 1 copy of the MSDS, 1 copy of the CSF and a \$145 registration fee for each product (\$290 / 2 years). In addition, WSDA requires submission of a new product registration form (AGR 630-4250) if you are registering more than 4 new products. Failure to submit a complete application can delay the registration process. Spray adjuvant registration information and forms are available on the WSDA web site at [www.wa.gov/agr/pmd/pesticides/forms.htm](http://www.wa.gov/agr/pmd/pesticides/forms.htm).
2. **Inadequate confidential statement of formula (CSF).** WSDA requires a CSF for all products registered in Washington. WSDA strongly recommends submitting the CSF using the WSDA Spray Adjuvant Confidential Statement of Formula (AGR 630-4325). The common chemical name and chemical abstracts service (CAS) number are required for all ingredients. In addition, the chemical name listed in 40 CFR 180 or 21 CFR 172, 182 or 184 and the specific citation are required for all ingredients if the product is labeled for food or feed use. WSDA will consider registration of adjuvants with ingredients that are not listed in 40 CFR or 21 CFR if the products are labeled for non-food and non-feed uses only (e.g. forestry, non-cropland, ornamental, right-of-way, turf). **Please refer to example CSF.**
3. **Incorrect function statement.** Adjuvant function terminology must be consistent with American Society for Testing and Materials (ASTM) Standard E 1519. Information on obtaining ASTM standards is available on the ASTM web site at [www.astm.org](http://www.astm.org). **Please refer to example label.**
4. **Incorrect ingredients statement.** The three primary principal functioning agents must be listed on the label, and the label must include an accurate percentage statement. **Please refer to example CSF and label.**
5. **Incorrect signal word and/or precautionary statements.** The signal word and precautionary statements (including personal protective equipment and first aid, when applicable) are based on mammal acute toxicity data (oral, dermal, inhalation, eye irritation and skin irritation). WSDA recommends using EPA Health Effects Test Guidelines for acute toxicity testing (OPPTS 870.1100, 870.1200, 870.1300, 870.2400, and 870.2500) to determine product toxicity. Test guidelines are available on the EPA web site at [www.epa.gov/OPPTS\\_Harmonized](http://www.epa.gov/OPPTS_Harmonized). The EPA Label Review Manual can be used as guidance for label precautionary statements, and is available on the EPA web site at [www.epa.gov/oppfead1/labeling/lrm](http://www.epa.gov/oppfead1/labeling/lrm). If mammal acute toxicity studies have not been conducted on the product, submit information for the product components. **Please refer to example supplemental information form and label.**
6. **Labeled for aquatic use without aquatic toxicity data.** If the adjuvant is labeled for aquatic use, aquatic toxicity studies are required for fish and aquatic invertebrates. WSDA recommends using EPA Ecological Effects Test Guidelines for fish acute toxicity testing (OPPTS 850.1075) and aquatic invertebrate acute toxicity testing (OPPTS 850.1010). Test guidelines are available on the EPA web site at [www.epa.gov/OPPTS\\_Harmonized](http://www.epa.gov/OPPTS_Harmonized). If there are no aquatic toxicity data for the adjuvant, the label needs to state that the product is not for aquatic use. **Please refer to example supplemental information form and label.**

**The following are fictional examples of a completed WSDA Spray Adjuvant Confidential Statement of Formula, a completed Supplemental Information Form, and a spray adjuvant label that complies with WSDA requirements. WSDA labeling requirements for spray adjuvants (WAC 16-228-1400(3)) are found in the General Pesticide Rules. The rules are available on the WSDA web site at [www.wa.gov/agr/pmd/etc/laws.htm](http://www.wa.gov/agr/pmd/etc/laws.htm).**



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## SPRAY ADJUVANT CONFIDENTIAL STATEMENT OF FORMULA

(BEFORE YOU COMPLETE THIS FORM, PLEASE REFER TO INSTRUCTIONS ON REVERSE)

Product: <i>XYZ Spray Adjuvant</i>	Registrant: <i>XYZ Chemical Company</i>
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### Principal Functioning Agents

Common Chemical Name, CAS Number	Chemical Name as Listed in 40 CFR or 21 CFR, Specific Citation	Spray Adjuvant Function(s) Performed	Nominal Percentage
<i>Nonylphenol ethoxylate, 9016-45-9</i>	<i><math>\alpha</math>-(<i>p</i>-nonylphenyl)-<math>\omega</math>-hydroxypoly (oxyethylene), 40CFR180.1001(c,d)</i>	<i>Nonionic surfactant</i>	<i>79.5%</i>
<i>Phosphoric acid, 7664-38-2</i>	<i>Phosphoric acid, 40CFR180.1001(c)</i>	<i>Acidifier</i>	<i>10%</i>
<i>Dimethylpolysiloxane, 63148-62-9</i>	<i>Dimethylpolysiloxane, 40CFR180.1001(c)</i>	<i>Antifoaming agent</i>	<i>0.5%</i>

**Total Percentage of Principal Functioning Agents: 90%**

### Constituents Ineffective as Spray Adjuvants

Common Chemical Name, CAS Number	Chemical Name as Listed in 40 CFR or 21 CFR, Specific Citation	Purpose in Formulation	Nominal Percentage
<i>Water, 7732-18-5</i>	<i>Not applicable</i>	<i>Diluent</i>	<i>10%</i>

**Total Percentage of Constituents Ineffective as Spray Adjuvants: 10%**

**Total Percentage of All Ingredients (Must Equal 100%): 100%**

Print Name: <i>Dr. John Smith</i>	Title: <i>Manager, Product Development</i>
Signature: <i>Dr. John Smith</i>	Date: <i>December 31, 2000</i>



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## SUPPLEMENTAL INFORMATION FOR SPRAY ADJUVANT REGISTRATION

(BEFORE YOU COMPLETE THIS FORM, PLEASE REFER TO INSTRUCTIONS ON REVERSE)

Spray Adjuvant Brand Name: <b>XYZ Spray Adjuvant</b>		Registrant: <b>XYZ Chemical Company</b>	Spray adjuvant function(s) claimed: <b>NIS, Acidifier, Antifoaming</b>
Name(s) of Principle Functioning Agent(s): <b>Alkylphenol ethoxylate, phosphoric acid, dimethylpolysiloxane</b>			Total percentage of Principle Functioning Agent(s): <b>90%</b>
Have studies demonstrated product efficacy for all spray adjuvant functions claimed? <b>Yes</b>	Are all ingredients exempted from the requirements for a tolerance under 40 CFR 180 or permitted for food use by 21 CFR 172, 182, or 184? <b>Yes</b> Are any on EPA Inerts List 1 or List 2? <b>No</b>		
Has phytotoxicity been observed? <b>No</b> Plant species: Minimum UR value (if applicable):	Have biodegradation studies been conducted? <b>No</b> Product classification:	Have aquatic toxicity studies been conducted for product? <b>No</b>	
<b>Mammal Acute Toxicity Data:</b>			
Oral LD50 (mg/kg) <sup>1</sup> : <b>&gt;5000</b> Species: <b>Rat</b>	Dermal LD50 (mg/kg) <sup>1</sup> : <b>&gt;5000</b> Species: <b>Rat</b>	Inhalation LC50 (mg/l) <sup>1</sup> : <b>&gt;2</b> Species: <b>Rat</b>	
Eye irritation (category) <sup>1</sup> : <b>II</b> Species: <b>Rabbit</b>	Skin irritation (category) <sup>1</sup> : <b>III</b> Species: <b>Rabbit</b>	Dermal sensitization (yes/no) <sup>1</sup> : <b>Unknown</b> Species:	
Signal word: <b>Warning</b>	PPE required: <b>Eye protection, gloves</b>		
<b>Aquatic Acute Toxicity Data:</b>			
Fish LC50 (mg/l) <sup>2</sup> : <b>Unknown</b> Species:	Fish NOEC (mg/l) <sup>2</sup> : <b>Unknown</b> Species:	Fish LC50 (mg/l) <sup>2</sup> : <b>Unknown</b> Species:	
Fish NOEC (mg/l) <sup>2</sup> : <b>Unknown</b> Species:	Invertebrate EC50 (mg/l) <sup>3</sup> : <b>Unknown</b> Species:	Invertebrate NOEC (mg/l) <sup>3</sup> : <b>Unknown</b> Species:	
Citations for studies referenced above (author(s), title, journal & page numbers (if applicable), date): <b>Efficacy – Dr. John Smithe (XYZ Chemical Company), Spray Adjuvant Research Trials, 1998 &amp; 1999.</b>			
<b>Toxicity – Dr. Elizabeth Jonez (ZYX Testing Laboratory), Acute Toxicity of XYZ Spray Adjuvant, June 15, 1998.</b>			
Print Name: <b>Dr. John Smithe</b>		Title: <b>Manager, Product Development</b>	
Signature: <b>Dr. John Smithe</b>		Date: <b>December 31, 2001</b>	

<sup>1</sup> Value (mg/kg or mg/l) or category, species (e.g. rat or rabbit) and time period (e.g. 24-hr).

<sup>2</sup> Value (mg/l), species and time period (e.g. 96-hr). Rainbow trout (*Oncorhynchus mykiss*) or coho salmon (*Oncorhynchus kisutch*) are preferred.

<sup>3</sup> Value (mg/l), species and time period (e.g. 48-hr). *Daphnia magna* or *Daphnia pulex* are preferred.

# XYZ SPRAY ADJUVANT

Nonionic Surfactant, Acidifier and Antifoaming Agent

## Principal Functioning Agents:

Alkylphenol ethoxylate, phosphoric acid, dimethylpolysiloxane	90%
Constituents Ineffective as Spray Adjuvants	10%
Total	100%

All ingredients are exempted from the requirements of a tolerance under 40 CFR 180.1001.

WA Reg. No. AW00000-01

Net Contents: 2.5 Gallons

## KEEP OUT OF REACH OF CHILDREN

### WARNING

Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles or face shield) and chemical-resistant gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

First Aid – If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

Call a poison control center or doctor for treatment advice.

### DIRECTIONS FOR USE

XYZ Spray Adjuvant is a proprietary product that functions as a wetter, spreader and acidifier. It also contains an antifoaming agent to help prevent foam formation during mixing and loading. XYZ Spray Adjuvant is intended for use with pesticides that are labeled for agricultural, forestry, non-cropland, ornamental, right-of-way and turf uses. Not for aquatic use.

#### Recommended Use Rates:

Nonionic Surfactant - Use 2 to 4 pints per 100 gallons. Some pesticide labels recommend a higher or lower surfactant use rate for optimum efficacy. Follow the pesticide label directions when this occurs.

Acidifier - Use 1 to 2 pints per 100 gallons. The use rate may need to be adjusted, depending on the initial pH of the water and the desired final pH. Use of a pH measuring device is recommended.

Do not exceed 5.0% v/v concentration.

#### Environmental Hazards:

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

#### Storage and Disposal:

Store in original container only. Do not contaminate water, food, or feed by storage or disposal. Do not reuse empty container. Triple rinse (or equivalent), then recycle or dispose of container in accordance with applicable state and local requirements.

Manufactured by:

XYZ Chemical Company  
20039 97th  
Middletown, USA

Rev. 12/31/01

*Inquiries regarding the availability of this information in an alternative format should be directed to the WSDA Receptionist at (360) 902-1976, or Telecommunications Device for the Deaf (360) 902-1996.*